

Committee on Resources

Witness Testimony

Testimony on H.Con. Res 151

James R. Lyons

Under Secretary, Natural Resources and Environment

U.S. Department of Agriculture

House of Representatives

Subcommittee on Forests and Forest Health

September 18, 1997

Ms. Chairman and Members of the Subcommittee

Thank you for the opportunity to appear before you today to discuss the views of the Administration regarding- the active management of the National Forests to maximize the reduction of carbon dioxide in the atmosphere. The Administration welcomes and supports efforts to address climate change, but strongly opposes House Concurrent Resolution 151 because it is misguided and undermines current national forest management laws.

The premise of the concurrent resolution is that young, fast-growing trees fix carbon dioxide more efficiently than mature trees. Therefore, the Forest Service should maximize carbon sequestration by harvesting mature trees, converting the wood to durable products, and replanting sites with seedlings.

As the committee is aware, the scientific basis for our mutually shared concerns about global climate change is very complex. Accordingly, our efforts to make substantive policy changes are equally complex and driven by scientific analysis. I want to make three basic points today- 1) the role of recycling, 2) the role of national forests in the carbon cycle, and 3) the potential for carbon sequestration from federal lands compared with private lands.

The Forest Service research program has done some extensive research quantifying the benefits of recycling wood fiber on carbon releases into the environment. Through technology developed by the federal government and private industry, and supported by government incentives to recycle, the United States has made a significant contribution to carbon sequestration by reducing energy costs of production and reusing wood fiber several times before sending it to a landfill.

Recognizing the value of storing carbon in wood products and substituting wood products for more fossil fuel-consuming products, the President included in the 1993) Climate Change Action Plan a proposal to expand paper recycling technology research. Priorities included research on the use of recycled wood and fiber in durable structural products suitable for housing markets. The President requested a \$2 million increase in research funding. Congress has appropriated \$200,000.

The President's Forest Plan was analyzed specifically for its contribution to carbon sequestration, and thus offers a good case study to evaluate national forest management policies in general. Contrary to the presumption of the concurrent resolution, the conservation strategy in the President's Forest Plan actually increases the amount of carbon dioxide sequestered by about 7 million metric tons by the year 2000. The

careful balance of forest protection and management and the role of old-growth forests is described well in a 1990 *Science* magazine article by Harmon, Ferrell and Franklin. In addition, the President's Forest Plan has strict standards about harvesting which are supported by scientific work by Mr. R. Nell Sampson. Sampson (1997) found that harvesting practices such as clear cutting eliminate canopy shade, increase soil temperatures, accelerate organic decomposition due to soil disturbance, and have other negative impacts on carbon storage in a forested ecosystem. The Forest Plan minimizes clearcuts, protects shade, foliage and canopy closures, minimizes ground disturbance, and avoids whole sale burning of slash, stumps and debris. Lastly, the President's Forest Plan meets all federal land management and environmental laws, and your resolution would create a conflict with existing law. While your resolution suggests that national forests should be managed to maximize carbon sequestration, current law requires us to practice multiple use which does not allow one use or management goal to dominate other uses. The US forest sector will store 109 million metric tons of carbon in 2000. Of this, our National Forests are projected to fix 21 million metric tons of carbon in 2000, store over 8 billion of tons of carbon, conserve biodiversity (and thus flexibility for private land management), and provide for multiple use according to our legal mandates. And although the annual carbon storage in private forests is expected to decline over the next several decades due to declining net growth in Northeastern forests as the trees age and removal of trees in the South at the same rate of their growth, annual carbon accumulation in our National Forests is expected to continue increasing.

Finally, I want to turn to the issue of maximizing growth of new biomass through forest management. The productivity of forestland in the United States varies widely across the country. Productivity is influenced by soil type, soil depth, growing season, rainfall, and other physical factors. Productivity is commonly measured according to the number of cubic feet of wood which one acre of land can grow in one year's time. If Congress was interested in maximizing carbon sequestration through tree growth, it is logical to look for the most productive sites which will grow the most cubic feet per year.

The Forest Service published a document called the Forest Resources of the United States (1994) which summarizes forest productivity across different land ownership using a standard of 85 cubic feet/acre/year. In the West, 67% of the private industrial lands are capable of producing more than 85 cubic feet per year compared to only 15% of the national forest lands in the West. The reason for this is that national forestlands are typically high elevation forests with shorter growing seasons and poorer soils. Similarly in the East, 55% of the private industrial land is capable of producing 85 cubic feet or more, and only 20% of the national forest land in the East have this level of productivity. The trend is the same, though less dramatic, between nonindustrial private lands and national forest lands in both the East and the West.

Thus, if growing trees quickly is the goal of this resolution, -it makes much more sense to focus our efforts in areas where we will receive the greatest return on our investment -- the most productive lands --- the private lands. The Forest Service can help make this investment not through a change in priorities for public land management, but by providing technical and - financial assistance to private landowners to help them increase productivity. The state and private forestry programs of the Forest Service are designed to deliver exactly this kind of assistance to landowners. In addition, the Natural Resource Conservation Service administers a number of programs which help landowners develop and implement plans that promote tree planting. The more efficient and effective place to focus tree planting and aggressive management is on private lands. The President's Climate Change Action Plan includes two actions that provide technical assistance and cost-sharing for nonindustrial private landowners to plant trees and improve forest management. These programs have resulted in tree planting on 135,000 acres of land.

I want to highlight for a minute your state, Mr. Chairman. I want to highlight for a minute your state, Mr. Chairman. The State of Alaska, as well as your neighbors Washington and Oregon, have replanting laws

which help continue the benefits of carbon sequestration on private lands in those states. Most states have forest practice laws which contribute to efforts to ensure that landowners practice sustainable forestry. Some states, such as Alabama and Georgia, do not have state forest practices laws, but rely instead on market conditions to encourage tree planting. In these cases, we depend on high lumber prices to promote replanting. In any case, the role of the private landowner, however it is influenced by state or federal policy, has the opportunity to make a much more significant -- and more profitable -- contribution to carbon sequestration through active management of productive lands.

There are many other efforts throughout the Forest Service and throughout the Administration which are targeted specifically to address the issue of climate change that are beyond the immediate scope of this resolution and this hearing. In summary, the Administration is enthusiastic about continuing this dialogue with Congress about the importance of addressing carbon sequestration and climate change--and the role of the forest sector, but is compelled to strongly oppose the concurrent resolution.

I am happy to answer questions that the Committee might have.

#